ACANTHUS

An international newsletter to encourage interest in the Acanthaceae

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This newsletter is offered to those interested in the Acanthaceae with the hope that it will foster study of this large family of plants. It is anticipated that this vehicle will permit timely communications among researchers of Acanthaceae. Response to the questionnarie mailed during the summer was encouraging. Of thirty-five circulars sent, twenty-seven were completed and returned to me. Based on your suggestions, ACANTHUS will appear two times a year as long as there is interest. In order to suceed, input is needed and sought from readers. Appropriate items for inclusion include: news and interest features, requests for materials and information, methods, and listings of recent publications. This number contains a directory of respondents, requests, and a literature summary for 1986. Number 2 will appear during the first five months of 1988 and will include a listing of services offered. Please send any appropriate items for inclusion to me at the above address. I look forward to hearing from you.

- T. F. Daniel

Directory

The following list of individuals interested in Acanthaceae is drawn primarily from those who responded to a questionaire circulated earlier this year. Current interests/projects are listed after each. Additions are welcome at any time.

BALKWILL, Kevin, C.E. Moss Herbarium, Department of Botany, University of the Witwatersrand, P.O. Wits, 2050, Johannesburg, South Africa - South African taxa, especially Chaetacanthus, Peristrophe, and Rhinacanthus

BIDGOOD, Sally, The Herbarium, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AB, England - Neuracanthus

BLACKMORE, Stephen, British Museum (Natural History), Cromwell Road, London SW7 5BD, England - pollen ontogeny and function

BARKER, Robyn, c/o State Herbarium of South Australia, Botanic Gardens, North TCE, Adelaide, S. Australia 5000, Australia - Australian and New Guinean taxa

BRUMMITT, R.K., The Herbarium, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AE, United Kingdom - general taxonomy; African taxa (Flora Zambesiaca and Flora of Tropical East Africa); Theileamea

CHUANG, T.I., Department of Biological Sciences, Illinois State University, Normal, Illinois, 61761, USA - cytotaxonomy

CRUZ, Maria A. V. da, Instituto de Botanica, Av. Miguel Stefano, 3031 CEP 04301-Sao Paulo, SP, Brasil - Brazilian taxa

DANIEL, Thomas F., Department of Botany, California Academy of Sciences, Golden Gate Park, San Francisco, CA 94118, USA - taxonomy, pollination biology, and cytology of New World taxa; Mexican taxa (Flora Novo-Galiciana, Flora of Chiapas)

DURKEE, Vern, Department of Biology, Grinnell College, Grinnell, Iowa 50112-0806, USA - Mesoamerican taxa, especially Nicaragua

EZCURRA, Cecilia, Instituto Darwinion, C.C. 22, 1642 San Isidro, Prov. Buenos Aires, Argentina - taxonomy and pollination ecology of South American taxa, especially Argentina

FURNESS, Carol A., Palynology Unit, The Herbarium, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AE, England - palynology of Old World taxa, especially Ecbolium

GETLIFFE NORRIS, Fiona, Botany Department, University of Natal, Pietermaritzburg 3200, South Africa - genera of

southern Africa; Asystasia; Ruellia in southern Africa

HANSEN, Bertil, Botanical Museum, Gothersgade 130, 1123 Copenhagen K, Denmark - taxa of southeastern Asia, Malesia, and Pacific Islands (Flora of Thailand, Flore du Cambodia du Laos et du Vietnam, Flora Malesiana)

HENREN, Mikael, Department of Systematic Botany, University of Uppsala, P.O. Box 541, S-751 21 Uppsala, Sweden - Justicia sect. Harnieria, Justicia flava, and Monechma debile in tropical Africa

HENRICKSON, James, Department of Biology, California State University, Los Angeles, California 90032, USA - Mexican taxa (especially Anisacanthus, Dyschoriste, and Justicia)

HUMPHRIES, Christopher J., Botany Department, British Museum (Natural History), Cromwell Road, London SW7 5BD, England - pollen and cladistics

IMMELMAN, Kathleen L., Botanical Research Institute, Private Bag X101, Pretoria, 0001, South Africa - Justicia, Siphonoglossa, and Aulojusticia for Flora of Southern Africa

KELBESSA, Ensermu, The National Herbarium, P.O. Box 3434, Addis Ababa, Ethiopia - Justicia sect. Ansellia

LOTT, Emily J., 1810 NW 23rd Blvd., #199, Gainesville, Florida 32605, USA - taxa of Valley of Mexico and western Mexico (Jalisco & Colima); propagation of native species

MCDADE, Lucinda A., Department of Botany, Duke University, Durham, North Carolina 27706, USA - phylogenetic systematics and reproductive biology of neotropical taxa; Aphelandra pulcherrima complex; Razisea; extra floral nectaries

MEAGHER, Martha, 14505 SW 286 Street, Leisure City, Florida 33033, USA - taxa of southeastern United States; Justicia in West Indies; chemotaxonomy

NILSSON, Orjan, Botanic Garden, Villavagen 8, S-752 36 Uppsala, Sweden - Sri Lankan taxa; floral morphology

RAMAMOORTHY, T.P., Departamento de Botanica, Instituto de Biologia, Universidad Nacional Autonoma de Mexico, Apartado postal 70-233, Del. Coyoacan, 04510 Mexico, D.F., Mexico - Mexican taxa; Ruellia

RZEDOWSKI, Jerzy, Centro Regional del Bajio, Instituto de Ecologia, Apartado postal 386, 61600 Patzcuaro, Michoacan, Mexico - Mexican taxa, especially of Bajio and adjacent regions

SCOTT, Peter E., Museum of Zoology, Louisiana State University, Baton Rouge, Louisiana 70803, USA - pollination ecology

STEINER, Mariette, Institute of Systematic Botany, P.O. Box 541, S-751 21 Uppsala, Sweden - Phaulopsis; taxa of Usambara Mountains in Tanzania

SREEMADHAVAN, C.P., The Valley School, Thatguni Post, Bangalore-560062, India

SURYAKANTA, Dr., 3-6-729, Himayatnagar, Hyderabad 500029, A.P. India - pollen

VOLLESEN, KAJ, Herbarium, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AB, England - African taxa; Ecbolium and Megalochlamys

WASSHAUSEN, Dieter C., Department of Botany, NHB-166, Smithsonian Institution, Washington, D.C. 20560, USA - neotropical taxa (including treatments for floras of Guianas, Venezuela, Ecuador, and Peru)

WOOD, John R.I., c/o 111 Forest Road, Liss, Hampshire, Gu33 7BP, United Kingdom - South American (especially Colombian) Habracanthus and related genera; Dicliptera and Justicia

Requests

BALKWILL requests material of Barleria, Dicliptera, Hypoestes, and Peristrophe and assistance with cytology.
EZCURRA requests South American material of Acanthaceae.
HUMPHRIES requests specimens of Acanthaceae from Central America.
IMMELMAN requests reprints pertaining to Acanthaceae.
KELBESSA requests herbarium specimens and seeds of Justicia sect. Ansellia.
MCDADE requests material, especially cuttings, of Aphelandra from Latin America.
GETLIFFE NORRIS requests exchange of reprints.
STEINER requests seeds with vouchers of Phaulopsis for genetic studies.

Recent Literature (1986)

BALKWILL, K., J. MANNING, & F. GETLIFFE NORRIS. 1986. Dicliptera fruticosa. Fl. Plants S. Afr. 49: pl. 1933.

BALKWILL, K., F. GETLIFFE NORRIS, & E. SCHOONRAAD. 1986. Taxonomic studies in the Acanthaceae: Testa microsculpturing in southern African species of Peristrophe. S. Afr. J. Bot. 52: 513-520.

BARKER, R. 1986. Revision of Australian Acanthaceae. J. Adelaide Bot. Gard. 9: 1-292.

DANIEL, T. 1986. Systematics of Tetramerium. Syst. Bot. Monogr. 12: 1-134.

DANIEL, T. 1986. New and reconsidered Mexican Acanthaceae. II. Southw. Natur. 31: 169-175.

DANIEL, T. 1986. Acanthaceae. Pp. 27-30. In D. Breedlove, Listados Floristicos de Mexico IV. Flora de Chiapas.

Instituto de Biologia, UNAM. Mexico.
DURKEE, V. 1986. Acanthaceae. In W. Burger, Flora Costaricensis. Fieldiana: Botany 18: 1-87.
EZCURRA, C. 1986. Una nueva especie de Aphelandra de la Argentina. Darwiniana 27: 399-402.
FURNESS, C. 1986. A Review of Pollen Apertures as Taxonomic Characters. PhD. Thesis, Univ. of Reading.
HEDREN, M. 1986. Two new species of Justicia sect Harnieria (Acanthaceae) from Tanzania. Nordic J. Bot. 6: 301-306.
HENRICKSON, J. 1986. Anisacanthus quadrifidus sensu lato (Acanthaceae). Sida 11: 286-299.
IMMELMAN, K. 1986. Notes on southern African species of Justicia L. Bothalia 16: 39.
IMMELMAN, K. 1986. Justicia bolusii. Fl. Plants S. Africa 49: pl. 1931.
IMMELMAN, K. 1986. Justicia anselliana. Fl. Plants S. Africa 49: pl. 1932.
LOTT, E., V. JARAMILLO, & J. RZEDOWSKI. 1986. Un genero nuevo de la parte meridional de Mexico: Gypsacanthus (Acanthaceae, Justicieae, Odontoneminae). Bol. Soc. Bot. Mex. 46: 29-35.
VASANTHY, G. & S. POCOCK. 1986. Radial through rotated symmetry of striate pollen of Acanthaceae. Can. J. Bot. 64: 3050-3058.
WASSHAUSEN, D. 1986. The systematics of the genus Pachystachys (Acanthaceae). Proc. Biol. Soc. Wash. 99: 160-185.
WOOD, J. 1986. Validation of the name Barleria hillcoatiae (Acanthaceae). Kew Bull. 41: 222.

Pollen of Bravaisia DC.

Pollen diversity is a well known feature of the Acanthaceae. The Trichanthereae (Bravaisia, Sanchezia, Suessenguthia, Trichanthera, and Trichosanchezia) possess a unique pollen type among Acanthaceae. Pollen of Bravaisia was recently studied during preparation of a monograph of that genus which is now in press at the California Academy of Sciences. Grains of B. integerrima (right) and B. tubiflora (left) are illustrated below. Lindau (Engl. Bot. Jahrb. 18: 36-64. 1893) described this pollen as a particular type of Rippenpollen which he termed Trichanthereenpollen. The grains are dicolporate with the compound aperatures centrally positioned on the two flattened faces, ninety degrees out of phase with one another. The exine sculpturing consists of a striate pattern of numerous furrows and ridges oriented in the same direction as the colpi (i.e., perpendicular to one another on the aperaturate faces of the grain). This type of pollen was referred to as "rotationally symmetric" by Vasanthy and Pocock (Can. J. Bot. 64: 3050-3058) and James Doyle has suggested to me the term "loxodicolporate" for it.

-T.F. Daniel